



DOCKET NO: L0624.70002US00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE


Applicant: Ya Fang Liu  
Serial No: 10/042,614  
Confirmation No: 6176  
Filed: January 9, 2002  
For: JNK INHIBITORS FOR TREATMENT OF  
NEUROLOGICAL DISORDERS

Examiner: Jon P. Weber  
Art Unit: 1651

---

**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the 2<sup>nd</sup> day of August, 2004.

  
Melissa L. Barlow Lyons

---

**Mail Stop Amendment**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**STATEMENT FILED PURSUANT TO THE DUTY OF  
DISCLOSURE UNDER 37 CFR §§1.56, 1.97 AND 1.98**

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, the Applicant requests consideration of this Information Disclosure Statement.

**PART I: Compliance with 37 C.F.R. §1.97**

This Information Disclosure Statement has been filed more than three months after the filing date of this application and after the mailing date of the first Office Action, but before the mailing date of either a final action under 37 C.F.R. §1.113 or a Notice of Allowance under 37 C.F.R. §1.311, or an action that otherwise closes prosecution in this application.

The fee of \$180.00 as set forth in 37 C.F.R. §1.17(p) is enclosed.

08/05/2004 MHEKONEN 00000051 10042614

02 FC:1806

180.00 DP

782691.1

PART II: Information Cited

The Applicant hereby makes of record in the above-identified application the information listed on the attached form PTO-1449 (modified). The order of presentation of the references should not be construed as an indication of the importance of the references.

The Applicant hereby makes the following additional information of record in the above-identified application.

The applicant would like to bring to the Examiner's attention the following co-pending applications that may contain subject matter related to this application:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Inventor(s)</u>
09/156,367	September 17, 1998	Ya Fang Liu
09/886,964	June 21, 2001	Ya Fang Liu
10/360,463	February 5, 2003	Ya Fang Liu

PART III: Remarks

Documents cited anywhere in the Information Disclosure Statement are enclosed unless otherwise indicated. It is respectfully requested that:

1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;
2. The enclosed form PTO-1449 be signed by the Examiner to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application;
3. The citations for the information be printed on any patent which issues from this application.

By submitting this Information Disclosure Statement, the Applicant makes no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

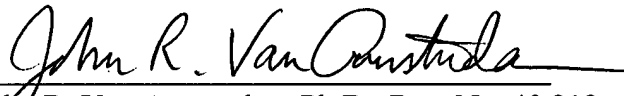
By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicant, the Examiner is urged to form his own conclusion regarding the relevance of the cited information.

An early and favorable action is hereby requested.

Respectfully submitted,  
Ya Fang Liu, *Applicant*

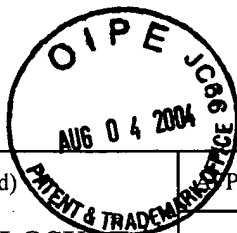
By:

  
John R. Van Amsterdam Ph.D., Reg. No. 40,212  
Wolf, Greenfield & Sacks, P.C.  
600 Atlantic Avenue  
Boston, Massachusetts 02210-2211  
Telephone: (617) 720-3500

Docket No. L0624.70002US00

Date: August 2, 2004

X08/04/04X



FORM PTO-1449/A and B (Modified)				APPLICATION NO.: 10/042,614		ATTY. DOCKET NO.: L0624.70002US00	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				FILING DATE: January 9, 2002		CONFIRMATION NO.: 6176	
				APPLICANT: Ya Fang Liu			
				GROUP ART UNIT: 1651		EXAMINER: Jon P. Weber	
Sheet	1	of	3				

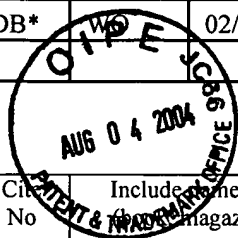
#### U.S. PATENT DOCUMENTS

Examiner's Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or of issue of Cited Document MM-DD-YYYY
		Number	Kind Code		
	BX*	4,980,281		Gerard M. Housey	12-25-1990
	BY*	5,385,915		Joseph D. Buxbaum et al.	01-31-1995
	BZ*	5,461,146		Michael E. Lewis et al.	10-24-1995
	CA*	5,468,872		Marcie A. Glicksman et al.	11-21-1995
	CB*	5,475,110		Robert L. Hudkins et al.	12-12-1995
	CC*	5,516,772		Marcie A. Glicksman et al.	05-14-1996
	CD*	5,534,426		Michael Karin et al.	07-09-1996
	CE*	5,554,523		Usharani Reddy et al.	09-10-1996
	CF*	5,591,855		Robert L. Hudkins et al.	01-07-1997
	CG*	5,593,884		Michael Karin et al.	01-14-1997
	CH*	5,594,009		Robert L. Hudkins et al.	01-14-1997
	CI*	5,605,808		Michael Karin et al.	02-25-1997
	CJ*	5,676,945		Usharani Reddy et al.	10-14-1997
	CK*	5,705,511		Robert L. Hudkins et al.	01-06-1998
	CL*	5,750,555		Uwe Trostmann et al.	05-12-1998
	CM*	5,756,494		Michael E. Lewis et al.	05-26-1998
	CN*	6,127,401		Jasbir Singh et al.	10-03-2000
	CO*	6,159,948		George S. Robertson et al.	12-12-2000
	CP*	6,455,525		Jasbir Singh et al.	09-24-2002
	CQ*	2002-0028815		Mark A. Ator et al.	03-07-2002
	CR*	2002-0061920		Diane E. Gingrich et al.	05-23-2002
	CS*	2002-0198219		Elfrida R. Grant et al.	12-26-2002

#### FOREIGN PATENT DOCUMENTS

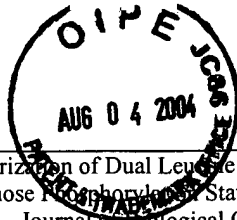
Examiner's Initials	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document (not necessary)	Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)
		Office/ Country	Number	Kind Code			
	CT*	CA	2,148,898		The General Hospital Corporation et al.	05-08-1995	
	CU*	WO	93/15201		New England Deaconess Hospital	08-05-1993	
	CV*	WO	94/17498		Enco-Tone Ltd.	08-04-1994	
	CW*	WO	95/03324		The Regents of the University of California	02-02-1995	
	CX*	WO	95/23849		The Children's Hospital of Philadelphia	09-08-1995	
	CY*	WO	99/58982		Ya Fang Liu	11-18-1999	
	CZ*	WO	00/13015		Cephalon, Inc.	03-09-2000	
	DA*	WO	00/47583		Cephalon, Inc.	08-17-2000	

	DB*	02/14536	Cephalon, Inc.	02-21-2002	



# OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Initials	Cite No	Included name of the author (in CAPITAL LETTERS) title of the article (when appropriate), title of the item (magazine, journal, serial, symposium, catalog, etc.), date, relevant page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
	DC*	Angeles, T. et al., Enzyme-linked Immunosorbent Assay for trkA Tyrosine Kinase Activity. Analytical Biochemistry, 236: 49-55, 1996.	
	DD*	Bergeron et al., Inhibition of Cell Growth by Overexpression of the ZPK Gene. Biochemical and Biophysical Research Communications, 231:153-155, 1997.	
	DE*	Blouin et al., Cell-Specific Expression of the ZPK Gene in Adult Mouse Tissues. DNA and Cell Biology, 15: 631-642, 1996.	
	DF*	DeAizpurua et al., Expression of Mixed Lineage Kinase-1 in Pancreatic $\beta$ -Cell Lines at Different Stages of Maturation and During Embryonic Pancreas Development. The Journal of Biological Chemistry, 272:16364-16373, 1997.	
	DG*	Diener et al., Activation of the c-Jun N-terminal kinase pathway by a novel protein kinase related to human germinal center kinase. Proc. Natl. Acad. Sci. USA, 94: 9687-9692, 1997.	
	DH*	Dorow et al., Identification of a new family of human epithelial protein kinases containing two leucine/isoleucine-zipper domains. Eur. J. Biochem, 213:701-710, 1993.	
	DI*	Ezoe et al, PTK1, a novel protein kinase required for proliferation of human melanocytes. Oncogene, 9:935-938, 1994.	
	DJ*	Fan et al., Dual Leucine Zipper-bearing Kinase (DLK) Activates p46SAPK and p38mapk but not ERK2. Journal of Biological Chemistry, 271:24788-24793, 1996.	
	DK*	Fanger, G.R. et al., MEKKs, GCKs, MLKs, PAKs, TAKs, and tpls: Upstream Regulators of the c-Jun Amino-Terminal Kinases? Current Opinion in Genetics and Development, 7:67-74, 1997.	
	DL*	Glicksman et al., CEP-1347/KT7515 Prevents Motor Neuronal Programmed Cell Death and Injury-Induced Dedifferentiation In Vivo. Journal of Neurobiology. 34: 361-370, 1998.	
	DM*	Glicksman et al., K-252a and Staurosporine promote Choline Acetyltransferase Activity in Rat Spinal Cord Cultures. Journal of Neurochemistry, 61:210-221, 1993.	
	DN*	Gupta et al., Human JNK3 Alpha 2 Protein Kinase (JNK3A2) mRNA. GenBank Accession No. U34819, July 25, 1996.	
	DO*	Gupta et al., Human JNK3 Alpha 2 Protein Kinase (JNK3A2) mRNA. GenBank Accession No. U34820, July 25, 1996.	
	DP*	Hambleton et al., Activation of c-Jun N-terminal kinase in bacterial lipopolysaccharide-stimulated macrophages. Proc. Natl. Acad. Sci. USA, 93: 2774-2778, 1996.	
	DQ*	Hirai et al., Activation of the JNK pathway by distantly related protein kinases, MEKK and MUK. Oncogene, 12: 641-650, 1996.	
	DR*	Holzman et al., Identification, Molecular Cloning, and Characterization of Dual Leucine Zipper Bearing Kinase. Journal of Biological Chemistry, 269: 30808-30817, 1994.	
	DS*	Hu et al., Human HPK1, a novel human hematopoietic progenitor kinase that activates the NIK/SAPK kinase cascade. Genes and Development, 10: 2251-2264, 1996.	
	DT*	Ing et al., MLK-3: identification of a widely-expressed protein kinase bearing an SH3 domain and a leucine zipper-basic region domain. Oncogene, 9:1745-1750, 1994.	
	DU*	Kaneko et al., Neurotrophic 3, 9-bis (alkylthio)methyl - and - bis(alkoxymethyl) -K- 252a Derivatives. J. Med. Chem. 40: 1863-1869, 1997.	
	DV*	Katoh et al., Cloning and Characterization of MST, a novel (putative) serine/threonine kinase with SH3 domain. Oncogene, 10: 1447-1451, 1995.	
	DW*	Kiefer et al., HPK1, a hematopoietic protein kinase activating the SAPK/JNK pathway. EMBO Journal, 15: 7013-7025, 1996.	
	DX*	Knight, E. et al., A Radioactive Binding Assay for Inhibitors of trkA Kinase. Analytical Biochemistry, 247: 376-381, 1997.	
	DY*	Leppa et al., Differential regulation of c-Jun by ERk and JNK during PC12 cell differentiation. The EMBO Journal, 17(15): 4404-4413, 1998.	
	DZ*	Leppa et al., Diverse functions of JNK signaling and c-Jun in stress response and apoptosis. Oncogene, 18:6158-6162, 1999.	



EA*	Mata et al., Characterization of Dual Leucine Zipper-bearing Kinase, a Mixed Lineage Kinase Present in Synaptic Terminals whose Phosphorylation State is Regulated by Membrane Depolarization via Calcineurin. Journal of Biological Chemistry, 271: 16888-16896, 1996.		
EB*	Nagata et al., The MAP kinase kinase kinase MLK2 co-localizes with activated JNK along microtubules and associates with kinesin superfamily motor KIF3. The EMBO Journal, 17: 149-158, 1998.		
EC*	Park et al., Ordering the Cell Death Pathway. J. Biol. Chem. 271(36): 21896-21905, 1996.		
ED*	Phelps et al., Generation Patterns of Four Groups of Cholinergic Neurons in Rat Cervical Spinal Cord: A Combined Tritiated Thymidine Autoradiographic and Choline Acetyltransferase Immunocytochemical Study. Journal of Comparative Neurology, 273: 459-472, 1998.		
EE*	Pombo et al., Activation of the SAPK pathway by the human STE20 homologue germinal centre kinase. Nature, 377: 750-754, 1995.		
EF*	Reddy et al., Cloning of a Novel Putative Protein Kinase Having a Leucine Zipper Domain From Human Brain. Biochemical and Biophysical Research Communication, 202: 613-620, 1994.		
EG*	Sakuma et al., Molecular Cloning and Functional Expression of a cDNA Encoding a New Member of Mixed Lineage Protein Kinase from Human Brain. Journal of Biological Chemistry, 272: 28622-28629, 1997.		
EH*	Sells et al., Emerging from the Pak: the p21-activated protein kinase family. Trends in Cell Biology, 7: 162-167, 1997.		
EI*	Smith et al., Trophic Effects of Skeletal Muscle Extracts on Ventral Spinal Cord Neurons in Vitro: Separation of a Protein with Morphologic Activity from Proteins with Cholinergic Activity. Journal of Cell Biology, 101: 1608-1621, 1995.		
EJ*	Su et al., NIK is a new Ste20-related kinase that binds NCK and MEKK1 and activates the SAPK/JNK cascade via a conserved regulatory domain. The EMBO Journal, 16: 1279-1290, 1997.		
EK*	Tung et al., A novel human SPS1/STE20 homologue, KHS, activates Jun N-terminal kinase. Oncogene, 14:653-659, 1997.		

EXAMINER	DATE CONSIDERED
----------	-----------------

#EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. 09/156,367 and 09/886,964, filed 09/17/1998 and 06/21/2001, respectively, and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

[NOTE - Must provide a copy of any patent, publication, other information listed, even if it was previously submitted to, or cited by, the U.S. Patent Office in an earlier application, unless the earlier application is identified by the IDS and is relied upon for an earlier filing date under 35 U.S.C. §120, and the copy was provided in the earlier application.]